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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional): A03P1068

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on 5/14/07

Signature: Estella Pineiro

Typed or printed name: Estella Pineiro

Application Number	Filed
10/674,641	09/29/2003

First Named Inventor: Jong Kil

Art Unit	Examiner
3762	Terri L. Smith

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

- [ ] applicant/inventor.
- [ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- [X] attorney or agent of record. Registration number 47,822
- [ ] attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

Signature

Peter A. Nichols
Typed or printed name

818-493-2323
Telephone number

5-14-07
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- [ ] *Total of _____ forms are submitted.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Jong Kil et al.	**Confirmation No.:**	4692
Serial No.:	10/674,641	**Examiner:**	Terri L. Smith
Filed:	09/29/2003	**Art Unit:**	3762
Docket No.:	A03P1068		
For:	METHOD AND SYSTEM FOR DISCRIMINATING RA DRIVEN FROM LA DRIVEN ATRIAL FLUTTER		

ARGUMENTS TO ACCOMPANY THE PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop **AF**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22213-1450

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P.O. Box 1450
Alexandria, VA 22313-1450
on:

May 14, 2007

Estella Pineiro 5/14/07

Dear Sir:

Applicants hereby submit the following Arguments as an attachment to the Pre-Appeal Brief Request for Review (Form PTO/SB/33). A Notice of Appeal is filed concurrently herewith.

Summary of Request

Applicants respectfully submit that the outstanding rejections of the above identified application are improper and without legal or factual basis. Applicants further submit that the outstanding rejections can be readily reviewed and summarily resolved in light of the present record. Accordingly, Applicants request review of the outstanding rejections pursuant to a pre-appeal conference.

In the Office action dated February 27, 2007, which was made final, the Examiner maintained the rejection of claims 1-3, 5, 6, 8 and 10-15 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 7,058,443 to Struble. Applicants' claimed

invention as recited in independent claims 1 and 12 is directed to an implantable cardiac stimulation device that provides therapeutic electrical stimulation to the heart of a patient. For example, independent claim 1 recites a device comprised in part by a processor operative to evaluate frequencies of left and right atrial signals and, if one of the left and right signals has a higher frequency, the processor determines the atrium with the higher frequency to be a source of atrial flutter.

Applicants respectfully submit that Struble does not disclose or suggest the recited claim elements. The Examiner's continued use of Struble as an allegedly anticipatory reference is therefore improper. Accordingly, without more evidence of unpatentability, Applicants are entitled to grant of a patent and therefore respectfully request that presently pending claims 1-15 be promptly allowed.

Argument

The Examiner's February 27, 2007 Office action is the third Office action Applicants have received to date in response to their application for patent. With respect to Applicants' pending claims the February 27, 2007 Office action maintained the Examiner's rejections from a previous Office action dated November 2, 2006.

Applicants submit that the Examiner has failed to establish a *prima facie* case of anticipation based upon the cited references. It is well settled that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently, in a single prior art reference and that the identical invention must be shown in as complete detail as contained in the claim. (see MPEP §2131), Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed Cir. 1987). Further, to serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with extrinsic evidence that makes clear that the missing descriptive matter is necessarily present in the thing described in the reference and that it would be so recognized by persons of ordinary skill in the art. Continental Can Co. USA vs. Monsanto Co. 948 F.2d 1264. 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

On page 2 of the Advisory Action dated April 16, 2007, the Examiner points to a number of sections of Struble which purportedly disclose that the frequency of a supra-

ventricular tachycardia (sVT) can be determined through the collection of timing data and that Struble therefore discloses utilizing the frequency of an sVT to identify the originating chamber of the sVT. The Examiner further alleges that the originating chamber of an atrial arrhythmia may be determined in a similar fashion as an sVT thereby anticipating Applicants' claimed invention. (see page 2 of the Advisory Action, dated April 16, 2007). Applicants respectfully disagree.

The system of Sruble uses the frequency or rate of an sVT to determine at what rate an implantable device needs to overdrive pace a chamber that has been previously identified as the source of the arrhythmia to terminate the arrhythmia. (Struble, col. 15, lines 48-52). Struble does not however identify the originating chamber as a function of the frequency or rate of an arrhythmic signal.

Rather, the system of Struble determines the origin of various arrhythmias as a function of the percentage of events first sensed in the right or left chambers. For instance, in the example illustrated in FIGS. 12A and 12B, the percentage of atrial flutter/atrial fibrillation AFL/AF events first sensed in the right atrium is 40% and the percentage first sensed in the left atrium is 60% such that the atrial arrhythmias are predominately being initiated in the left atrium. (Struble, col. 15, lines 56-67).

The Examiner alleges that the percentage of events sensed in a particular chamber represents the frequency of signals sensed in that chamber so that Struble anticipates the claimed invention. Applicants disagree. The system of Struble detects how often (i.e. how frequently) a signal is first detected in a particular chamber of the heart and identifies the originating chamber of an arrhythmia as being the chamber with the higher percentage of initial detections (i.e. the chamber in which the arrhythmia is most often first detected).

Thus, when the system of Struble detects an arrhythmia it then determines in which chamber an arrhythmic signal was first detected. Struble then records that data over time to determine in which chamber the arrhythmias are predominately being initiated in to identify the origin of the arrhythmia. Struble then delivers therapy (i.e. ATP) in the chamber initiating the arrhythmia.

Struble does not however disclose or anywhere suggest analyzing atrial signals themselves to determine the frequency of the signal but rather tracks how frequently

signals are initially detected in a particular chamber. Determining how often a signal is detected in a particular chamber (i.e. the frequency of detection of a signal) as disclosed in Struble is not expressly of inherently equivalent to determining the frequency of the signal itself. Moreover, Struble does not determine which atrial signal (i.e. left or right) has the higher frequency and identify the chamber having the signal with the higher frequency as the source of the atrial flutter as recited in the claimed invention.

Accordingly, Applicants submit that claims 1 and 12 are novel and nonobvious over Struble and are allowable. Applicants further submit that claims 2-11 and claims13-15 that depend from claims 1 and 12 respectively are allowable as are claims 1 and 12 and for additional limitations recited therein.

Conclusion

Applicants respectfully submit that the Examiner's application of Struble as an anticipatory reference is improper. Applicants therefore believe that the present application is in condition for allowance. Prompt and favorable consideration of Applicants' Pre-Appeal Brief Request for Review is respectfully requested.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 16-0068

Respectfully submitted,

5-14-07
Date

Peter A. Nichols, Reg. No. 47,822
Patent Attorney for Applicants

CUSTOMER NUMBER: 36802